

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled).

2. (Currently Amended) A demodulation apparatus for mobile communication having capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

path location comparing means for comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

threshold setting means for setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

level comparing means for comparing the unmatched path location data with the
~~signal selecting means for comparing each of said incoming signals with a~~ threshold set by said threshold setting means and for selecting said incoming signals according to the result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said threshold setting means sets the threshold based on [[a]] correlation value information for said incoming signals selected in [[a]] the previous cycle.

3. (Canceled).

4. (Currently Amended) A demodulation apparatus for mobile communication having capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

path location comparing means for comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for

outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

threshold setting means for setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

level comparing means for comparing the unmatched path location data with the
~~signal selecting means for comparing each of said incoming signals with a~~ threshold set by said threshold setting means and for selecting said incoming signals according to the result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said ~~signal selecting~~ level comparing means selects signals that are signals of path locations different from path locations of said incoming signals selected in ~~[[a]]~~ the previous cycle and that are equal to or above the threshold.

5. (Currently Amended) A demodulation apparatus for mobile communication having capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

path location comparing means for comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

threshold setting means for setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

level comparing means for comparing the unmatched path location data with the
~~signal selecting means for comparing each of said incoming signals with a~~ threshold set by said threshold setting means and for selecting said incoming signals according to the result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said threshold setting means sets the threshold based on the maximum peak value of said incoming signals selected in ~~[[a]]~~ the previous cycle.

6. (Previously Presented) A demodulation apparatus for mobile communication according to claim 2, wherein said threshold setting means sets the threshold as a fixed value.

7. (Currently Amended) A demodulation apparatus having capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

path location comparing means for comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

threshold setting means for setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

level comparing means for comparing the unmatched path location data with the
~~signal selecting means for comparing each of said incoming signals with a threshold set by~~
said threshold setting means and for selecting said incoming signals according to the result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said threshold setting means sets the threshold based on either: a) the maximum peak value obtained by calculation of a delay profile, or b) an average of values other than a detected peak value by calculation of a delay profile.

8. (Canceled).

9. (Canceled).

10. (Currently Amended) A demodulation method for mobile communication providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

~~a first~~ second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

a ~~second~~ third step of comparing ~~each of said incoming signals~~ the unmatched path location data with ~~[[a]]~~ the threshold set by said ~~first~~ second step and selecting said incoming signals according to a result of said comparing even if said incoming signals do not meet said predetermined condition,

wherein said ~~first~~ second step comprises setting the threshold based on ~~[[a]]~~ correlation value information for said incoming signals selected in ~~[[a]]~~ the previous cycle.

11. (Canceled).

12. (Currently Amended) A demodulation method for mobile communication providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

a ~~first~~ second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

a ~~second~~ third step of comparing ~~each of said incoming signals~~ the unmatched path location data with ~~[[a]]~~ the threshold set by said ~~first~~ second step and selecting said incoming signals according to a result of said comparing even if said incoming signals do not meet said predetermined condition,

wherein said ~~second~~ third step comprises selecting signals that are signals of path locations different from path locations of said incoming signals selected in the previous cycle and that are equal to or above the threshold.

13. (Currently Amended) A demodulation method for mobile communication providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path

location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

a ~~first~~ second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

a ~~second~~ third step of comparing ~~each of said incoming signals~~ the unmatched path location data with ~~[[a]]~~ the threshold set by said ~~first~~ second step and selecting said incoming signals according to a result of said comparing even if said incoming signals do not meet said predetermined condition,

wherein said ~~first~~ second step comprises setting the threshold based on the maximum peak value of the signals selected in the previous cycle.

14. (Currently Amended) A demodulation method for mobile communication according to claim 10, wherein said ~~first~~ second step comprises setting the threshold as a fixed value.

15. (Currently Amended) A demodulation method for mobile communication providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

a ~~first~~ second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

a ~~second~~ third step of comparing ~~each of said incoming signals~~ the unmatched path location data with ~~[[a]]~~ the threshold set by said ~~first~~ second step and selecting said incoming signals according to a result of said comparing even if said incoming signals do not meet said predetermined condition,

wherein said ~~first~~ second step comprises setting the threshold based on either: a) the maximum peak value obtained by calculation of a delay profile, or b) an average of values other than a detected peak value by calculation of a delay profile.

16. (Canceled).

17. (Canceled).

18. (Currently Amended) A recording medium on which a control program for a demodulation method for mobile communication is recorded, the demodulation method providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, wherein

the control program is recorded on the recording medium and comprises a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle, and a second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle, and a ~~second~~ third step of comparing each of said incoming signals the unmatched path location data with [[a]] the threshold set by said first second step and selecting said incoming signals according to a result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said ~~first~~ second step comprises setting the threshold based on [[a]] correlation value information for said incoming signals selected in [[a]] the previous cycle.

19. (Canceled).

20. (Currently Amended) A recording medium on which a control program for a demodulation method for mobile communication is recorded, the demodulation method providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, wherein

the control program is recorded on the recording medium and comprises a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle, and a second step of setting a threshold based solely on the finger assignment data obtained in the

previous cycle, and a ~~second~~ third step of comparing ~~each of said incoming signals~~ the unmatched path location data with [[a]] the threshold set by said ~~first~~ second step and selecting said incoming signals according to a result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said ~~second~~ third step comprises selecting signals that are signals of path locations different from path locations of said incoming signals selected in the previous cycle and that are equal to or above the threshold.

21. (Currently Amended) A recording medium on which a control program for a demodulation method for mobile communication is recorded, the demodulation method providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, wherein

the control program is recorded on the recording medium and comprises a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle, and a second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle, and a ~~second~~ third step of comparing ~~each of said incoming signals~~ the unmatched path location data with [[a]] the threshold set by said ~~first~~ second step and selecting said incoming signals according to a result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said ~~first~~ second step comprises setting the threshold based on the maximum peak value of said incoming signals selected in [[a]] the previous cycle.

22. (Currently Amended) A recording medium according to claim 20, wherein said ~~first~~ second step comprises setting the threshold as a fixed value.

23. (Currently Amended) A recording medium on which a control program for a demodulation method for mobile communication is recorded, the demodulation method providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, wherein

the control program is recorded on the recording medium and comprises a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle, and a second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle, and a second third step of comparing each of said incoming signals the unmatched path location data with [[a]] the threshold set by said first second step and selecting said incoming signals according to a result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said ~~first~~ second step comprises either: a) setting the threshold based on the maximum peak value obtained by calculation of a delay profile, or b) setting the threshold based on an average of values other than a detected peak value by calculation of a delay profile.

24. (Canceled).

25. (Currently Amended) A demodulation apparatus for mobile communication having capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

path location comparing means for comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

threshold setting means for setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

level comparing means for comparing the unmatched path location data with the
~~signal selecting means for comparing each of said incoming signals with a~~ threshold set by said threshold setting means and for selecting said incoming signals according to the result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said predetermined condition is to detect the peak of said incoming signals at a certain path location for more than once.

26. (Currently Amended) A demodulation apparatus for mobile communication having capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

path location comparing means for comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

threshold setting means for setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

level comparing means for comparing the unmatched path location data with the
~~signal-selecting means for comparing each of said incoming signals with a threshold set by~~
said threshold setting means and for selecting said incoming signals according to the result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said ~~signal-selecting~~ level comparing means selects said incoming signals if the respective levels of said incoming signals is equal to or above said threshold.

27. (Currently Amended) A demodulation method for mobile communication providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

a ~~first~~ second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

a second third step of comparing each of said incoming signals the unmatched path location data with [[a]] the threshold set by said ~~first~~ second step and selecting said incoming signals according to a result of said comparing even if said incoming signals do not meet said predetermined condition,

wherein said predetermined condition is to detect the peak of said incoming signals at a certain path location for more than once.

28. (Currently Amended) A demodulation method for mobile communication providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, comprising:

a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle;

a ~~first~~ second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle; and

a ~~second~~ third step of comparing each of said incoming signals the unmatched path location data with [[a]] the threshold set by said first second step and selecting said incoming signals according to a result of said comparing even if said incoming signals do not meet said predetermined condition,

wherein said ~~second~~ third step selects said incoming signals if the respective levels of said incoming signals is equal to or above said threshold.

29. (Currently Amended) A recording medium on which a control program for a demodulation method for mobile communication is recorded, the demodulation method providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, wherein

the control program is recorded on the recording medium and comprises a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle, and a second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle, and a ~~second~~ third step of comparing ~~each of said incoming signals the~~ unmatched path location data with [[a]] the threshold set by said ~~first~~ second step and selecting said incoming signals according to a result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said predetermined condition is to detect the peak of said incoming signals at a certain path location for more than once.

30. (Currently Amended) A recording medium on which a control program for a demodulation method for mobile communication is recorded, the demodulation method providing capability of cyclically selecting signals that meet a predetermined condition out of a plurality of incoming signals that travel via different paths, combining the incoming signals to obtain combined signals, and outputting the combined signals, wherein

the control program is recorded on the recording medium and comprises a first step of comparing finger assignment data obtained in a previous cycle with correlation peak detection data obtained in a current cycle, and for outputting matched path location data and unmatched path location data based on data received in the current cycle and in the previous cycle, and a second step of setting a threshold based solely on the finger assignment data obtained in the previous cycle, and a ~~second~~ third step of comparing each of said incoming signals the unmatched path location data with [[a]] the threshold set by said first second step and selecting said incoming signals according to a result of said comparison even if said incoming signals do not meet said predetermined condition,

wherein said second step selects said incoming signals if the respective levels of said incoming signals is equal to or above said threshold.

31. (New) A demodulation apparatus for mobile communication according to claim 2, further comprising:

path timing determining means for receiving the matched path location data output by the path locating comparing means; and

guard level controlling means for receiving the comparison result of said level comparing means, and for either: a) disregarding a guard level if the peak detection data in the current cycle is equal to or greater than the threshold, or b) executing the guard level in the path timing determining means if the peak detection data in the current cycle is less than the threshold.

32. (New) A demodulation apparatus for mobile communication according to claim 4, further comprising:

path timing determining means for receiving the matched path location data output by the path locating comparing means; and

guard level controlling means for receiving the comparison result of said level comparing means, and for either: a) disregarding a guard level if the peak detection data in the

current cycle is equal to or greater than the threshold, or b) executing the guard level in the path timing determining means if the peak detection data in the current cycle is less than the threshold.

33. (New) A demodulation apparatus for mobile communication according to claim 5, further comprising:

path timing determining means for receiving the matched path location data output by the path locating comparing means; and

guard level controlling means for receiving the comparison result of said level comparing means, and for either: a) disregarding a guard level if the peak detection data in the current cycle is equal to or greater than the threshold, or b) executing the guard level in the path timing determining means if the peak detection data in the current cycle is less than the threshold.

34. (New) A demodulation apparatus for mobile communication according to claim 7, further comprising:

path timing determining means for receiving the matched path location data output by the path locating comparing means; and

guard level controlling means for receiving the comparison result of said level comparing means, and for either: a) disregarding a guard level if the peak detection data in the current cycle is equal to or greater than the threshold, or b) executing the guard level in the path timing determining means if the peak detection data in the current cycle is less than the threshold.

35. (New) A demodulation method according to claim 10, further comprising:

a fourth step of receiving the matched path location data output in the first step; and

a fifth step of receiving the comparison result of the third step, and for either: a) disregarding a guard level in a path timing determining unit that determines a path timing if the peak detection data in the current cycle is equal to or greater than the threshold, or b) executing the guard level in the path timing determining unit if the peak detection data in the current cycle is less than the threshold.

36. (New) A demodulation method according to claim 12, further comprising:

a fourth step of receiving the matched path location data output in the first step; and
a fifth step of receiving the comparison result of the third step, and for either: a) disregarding a guard level in a path timing determining unit that determines a path timing if the peak detection data in the current cycle is equal to or greater than the threshold, or b) executing the guard level in the path timing determining unit if the peak detection data in the current cycle is less than the threshold.

37. (New) A demodulation method according to claim 13, further comprising:
a fourth step of receiving the matched path location data output in the first step; and
a fifth step of receiving the comparison result of the third step, and for either: a) disregarding a guard level in a path timing determining unit that determines a path timing if the peak detection data in the current cycle is equal to or greater than the threshold, or b) executing the guard level in the path timing determining unit if the peak detection data in the current cycle is less than the threshold.

38. (New) A demodulation method according to claim 15, further comprising:
a fourth step of receiving the matched path location data output in the first step; and
a fifth step of receiving the comparison result of the third step, and for either: a) disregarding a guard level in a path timing determining unit that determines a path timing if the peak detection data in the current cycle is equal to or greater than the threshold, or b) executing the guard level in the path timing determining unit if the peak detection data in the current cycle is less than the threshold.